PATENT Serial No. 09/697,419 Attorney Docket No. 99P07938US01

AMENDMENTS

In the Claims

Please amend the claims as follows:

1. (currently amended) A programmable logic controller comprising:

a single chip micro controller;

internal RAM that is internal to said single <u>chip</u> micro controller; and internal re <u>programmable</u> read only memory that is internal to said single chip micro controller, the internal re programmable memory being used to store a user program for actualizing programmable logic controller functions.

2. (currently amended) A programmable logic controller program for directing a programmable logic controller, comprising;

a user program; and

system sequencing and coordination instructions necessary to operate said programmable logic controller, wherein said user program and system sequencing and coordination instructions are compiled together into a single executable firmware module of said programmable logic controller within a single chip, requiring no external operating system.

3. (currently amended) A programmable logic controller system, comprising:

within a single chip, a program execution device having a re-programmable reprogrammable memory whose function is limited to program execution of a
programmable logic controller within said single chip; and

a separable communication/programming device, which provides the programmability function, wherein said communication/programming device provides in a separable package all functions required for external communication and conversion of a user program for controlling said programmable logic controller from symbolic form to

PATENT Serial No. 09/697,419 Attorney Docket No. 99P07938US01

binary code, and loading of that code into said program execution device and wherein said binary code is programmed into said <u>re-programmable re programmable memory</u> of said program execution device by direct manipulation of logic controls of said <u>re-programmable re-programmable memory</u>.